



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

644.4103
Job Sheet 175548



Part No: 644.4103

Job Qty: 10 ea

Part Name: Aft Bracket Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/6/18

Job Tracking No:

Due Date: 4/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG 644.4100 Rev F2 IPP REV:A 16.12.06 NEW ISSUE DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	10 Ea		4/13/18	0.00	0.00	Start Up Small Fab-4		JUN 13 2018
100	Small Fab	10 pcs		4/16/18	0.00	10.00	Small Fab-5		
110	QC	10 pcs		4/16/18	0.00	0.00	QC5		
120	Packaging	10 pcs		4/16/18	0.00	0.00	Packaging3		
130	QC21-SA	10 Ea		4/16/18	0.00	0.00	QC21		

Part Op Descriptions: 100 - ASSEMBLE BRACKETS WITH RIVETS AS PER DWG

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
644.4111	Bracket, Aft Pivot	10 Ea (1 ea)	90-Start up Operation	5059820
644.4115	Bracket, Small Aft	10 Ea (1 ea)	90-Start up Operation	505987
MS20426AD5-8	Rivet	30 Ea (3 ea)	90-Start up Operation	FM136199-40

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	644.4111	10	0	0
	644.4115	10	0	0
	MS20426AD5-8	30	579	0

Part Specifications

Specifications could not be found



Container No: S080773



Part: 644.4103

Job No: 175548

Serial No/Batch: S080773

Revision: F2

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 06/13/18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

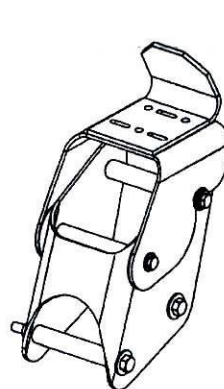
QA Closed: _____ Date: _____

Work Order update only ☐

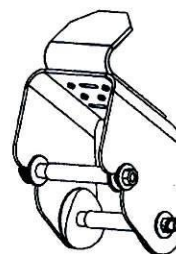
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

NOTES:

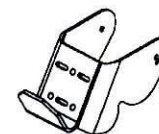
1. IDENTIFY ALL PARTS IN ACCORDANCE WITH MPP-120
2. MATERIAL: 2024-T3 ALUMINUM
3. MATERIAL: 6061-T6 ALUMINUM
4. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK;
PRETREAT PR-148 ADHESION PROMOTER,
PRIME WITH DESOTO 515X349 IAW BMS 10-79 TYPE III CLASS A GRADE A,
POLYURETHANE PAINT CARDINAL 6409-RD03-S WITH CATALYST 340HP.
5. MATERIAL: MDS-FILLED NYLON 6/6 SHEET, CUT OD CIRCLE USING 2" GASKET PUNCH,
CUT ID HOLE USING 1/4" GASKET PUNCH
6. MATERIAL: MDS-FILLED NYLON 6/6 SHEET, CUT OD CIRCLE USING 2" GASKET PUNCH,
CUT ID HOLE USING 5/16" GASKET PUNCH
7. DIMENSION VALUE HAS FINISH COATING OF 6-10 MIL (.006-.010) TAKEN INTO
CONSIDERATION
8. ADD ADDITIONAL WASHER UNDERNEATH CASTLE NUTS IF NECESSARY.
9. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK.



644.4101



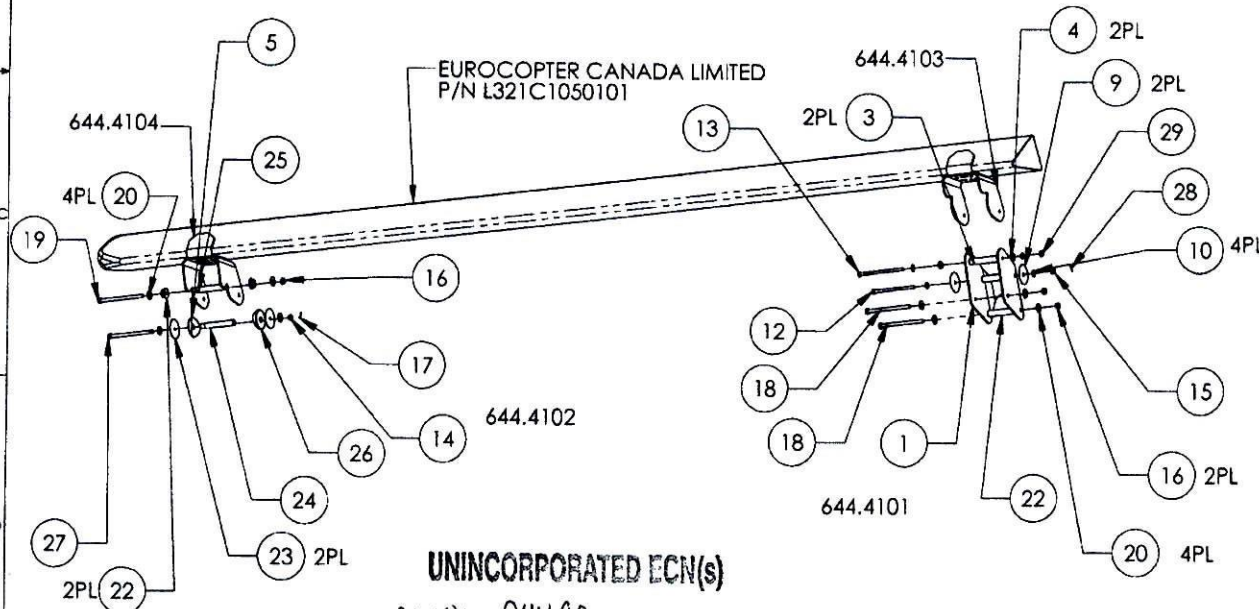
644.4102



644.4103



644.4104

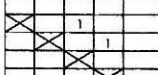


UNINCORPORATED ECN(S)

04286, 04489

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECH 01320, 01322, 01333, & 01357	11-22-05	S. JOHNS
B	INCORPORATED ECH 01370, 01418, 01794, & 01838	05-21-07	P. BRAYO
C	INCORPORATED ECH 01908, 02524, 03027	12-14-10	P. BRAYO
D	INCORPORATED ECH 00111, 00112, 00308, & 03240	12-30-12	P. BRAYO
E	INCORPORATED ECH 00941	06-19-13	P. BRAYO
F	INCORPORATED ECH 00006	2-29-13	P. BRAYO

		1	29	601.3273	LOCKNUT FULL	MS21044N4
		1	28	601.2640	COTTER PIN	MS24665-132
	1		27	207.2328	BOLT, HEX	AN5-45
	1		26	644.4124	WASHER, PIVOT	△△△
		1	25	644.4123	FWD CROSSTUBE BUSHING	△△△
		1	24	644.4122	FWD CROSSTUBE BUSHING	△△△
	2		23	644.4121	WASHER, NYLON	△
		1	22	644.4120	SPACER, CROSS-TUBE	△△△
	2		21	644.4119	SPACER, FWD STOP	△△△
	4	4	20	601.2110	WASHER, FLAT THICK	NAS114PC 05039
		1	19	601.2250	BOLT, HEX	AN5-50
		2	18	601.2249	BOLT, HEX	AN5-43A
		1	17	601.3315	COTTER PIN	MS24665-210
	1	2	16	601.3272	LOCKNUT FULL	MS21044N5
		1	15	601.1435	NUT, HEX CASTLE FULL	AN310-4
		1	14	601.3270	NUT, HEX CASTLE FULL	AN310-5
		1	13	601.3407	BOLT, HEX	AN6-47A
		1	12	601.2434	BOLT, HEX	AN4-45
6	3		11	601.2326	RIVET, COUNTERSUNK	MS20426AD5-B
		4	10	601.0863	WASHER, THICK	NAS114PC 0463R
		2	9	644.4118	WASHER, NYLON	△△
1			8	644.4117	BRACKET, FWD PIVOT	△△
1			7	644.4116	BRACKET [SMALL], FWD	△△
	1		6	644.4115	BRACKET [SMALL], AFI	△△△
		1	5	644.4114	WASHER, PIVOT	△△△
		2	4	644.4113	SPACER, STOP	△△△
		2	3	644.4112	SPACER	△△△
		1	2	644.4111	BRACKET, AFI PIVOT	△△△
		1	1	644.4110	BRACKET [LARGE], AFI	△△△

		644.4104 FWD BRACKET ASSY 644.4103 AFT BRACKET ASSY 644.4102 PIVOT STEP ASSY 644.4101 PIVOT STEP ASSY						
4104	4103	102	4101	FIND #	PART #	DESCRIPTION	MATL	SPEC.
QTY						PARTS LIST		
NEXT ASSY (S)						APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANVIEW, CA. 92076-3512 (760)724-5312		
644.1800						DRAWING APPROVAL S JOSEPH 08-27-03 CONTRACT NO.		
USE THE FOLLOWING SPECIFICATIONS DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED 2 PLACES DECIMALS 103 3 PLACES DECIMALS 1010 ANGLES 1/2						SIZE CAGE CODE DWG. NO. 644.4100 B 07M26 SCALE: NONE SHEET 1 OF 1		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By 	
				Lead hand / Supervisor Approval Verification 	
				QC / QA Coordinator Approval 	

Root Cause			FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____ _____ _____				
Misidentified ☐	Past Due ☐					